United States District Court
For the Northern District of California

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5   UNITED STATES DISTRICT COURT

6   NORTHERN DISTRICT OF CALIFORNIA

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8   INFORMATICA CORPORATION

9   Plaintiff,   No. C 02-03378 EDL

10   v.   **FINDINGS OF FACT AND CONCLUSIONS**
                                               OF LAW ON INEQUITABLE CONDUCT
11   BUSINESS OBJECTS DATA
     INTEGRATION, INC.
12
           Defendant.
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     _____/
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15   This action came before the Court for jury trial on March 12, 2007. The parties presented

16   testimonial and documentary evidence on the issues raised by the First Amended Complaint of Plaintiff

17   Informatica Corporation ("Informatica"), and the Amended Answer and Counterclaim of Defendant

18   Business Objects Data Integration, Inc. ("BODI"). On April 2, 2007, the jury rendered a verdict for

19   Informatica, finding that BODI indirectly infringed claims 1, 8, 12, 15, and 18 of United States Patent

20   No. 6,014,670 ("the '670 patent"), and claims 5, 7, and 11 of United States Patent No. 6,339,775 ("the

21   '775 patent"), and that the claims are not invalid for anticipation, statutory bar or obviousness. The jury

22   further found that BODI's infringement was willful. The jury awarded Informatica reasonable royalty

23   damages in the amount of $25,240,000.

24   On April 9 and April 10, 2007, the Court held a bench trial on BODI's affirmative defenses and

25   counterclaims that the '670 Patent and '775 Patent are unenforceable for inequitable conduct. On May

26   8, 2007, the parties appeared through counsel before the Court for oral argument. Having considered

27   the evidence presented at trial, both to the jury and to the Court, the papers submitted by the parties, and

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1   the argument of counsel, the Court concludes that enforcement of the patents in suit is not barred by

2   inequitable conduct.

3   **I.   FINDINGS OF FACT**

4   **A.   Prosecution of the '670 Patent**

5   The '670 Patent issued on January 11, 2000 from application 08/966,449, filed on November

6   7, 1997. The named inventors are Diaz Nesamoney and MS Kiumarse Zamanian. The '670 patent,

7   entitled "Apparatus and Method for Performing Data Transformations in Data Warehousing," is

8   assigned to Informatica. Trial Ex. 214. Mr. Nesamoney was a founder and Chief Technical Officer

9   of Informatica at the time the application was filed. Dr. Zamanian was an employee of Informatica

10 when the application was filed.

11   The '670 Patent describes a method of transforming data in the Extract, Transform, and Load

12 ("ETL") process of building a data warehouse using "transformation objects." Claim 1 of the '670

13 Patent describes a method comprising the following steps:

14   specifying at least one source table containing data . . .;
                storing metadata corresponding to a plurality of transformation objects, wherein the
15   transformation objects have at least one transformation object input port for
                     accepting data and at least one transformation object output port for outputting
16   transformed data and particular transformation objects transform data according to
                     the metadata corresponding to that particular transformation object;
17   specifying a target table for storing manipulated data . . .;
                selecting at least one of the transformation objects;
18   mapping data from the first source table output port to a first transformation object
                     input port of a first selected transformation object, wherein the mapping is defined
19   by a human user;
                transforming the data according to the metadata corresponding to the first selected
20   transformation object;
                mapping the transformed data from a first transformation object output port to the first
21   target table input port.

22 Trial Ex. 214 at cols.19:59-20:31.

23   Prior to filing the application for the '670 Patent, the inventors were aware that there were

24 ETL software programs on sale and in use in the United States, including Informatica's own

25 PowerMart 3.0 product and competing products Sagent 1.0 and VMark. Trial Tr. at 331:18-332:6;

26 540:10-541:6 and 550:25-551:25; Bench Trial Tr. at 2286:17-21 and 2287:3-14. Informatica did not

27 disclose Informatica PowerMart 3.0, Sagent Data Mart Solution 1.0, or VMark DataStage 1.0 to the

28 PTO during the prosecution of the '670 Patent. Pl. Prop. Findings (docket no. 469), ¶¶ 8, 15, 21.

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1   By Office Action dated March 3, 1999, the Patent Office Examiner rejected the claims of the

2   '670 Patent application. Trial Ex. 192 at 124-130 (citing the Young and Coleman patents). On

3   April 7, 1999, Informatica submitted an Information Disclosure Statement disclosing three articles

4   that were cited by a foreign patent office in a counterpart foreign application:

5   White, Colin. "Data Warehousing. Cleaning and Transforming Data." InfoDB Volume 10
             Number 6. April 1997. Database Associates INT, USA. Pages 11-12.
6   XP-002091743.
     White, Colin. "Managing Data Transformations." Byte (International Edition) Volume 22,
7   Number 12. December 1997. McGraw Hill, USA. Pages 53-54.
             XP002091744.
8   Squire, Cass. "Data Extraction and Transformation for the Data Warehouse." 1995 ACM
             Sigmod International Conference on Management of Data, San Jose, CA,
9   USA, May 22-25, 1995. Pages 446-447. XP0092091745.

10   Trial Ex. 192 at 603-605. On May 26, 1999, Informatica submitted an Amendment and Response to

11   the PTO, amending the claims of the patent application. Id. at 617-624. Informatica filed a

12   continuation-in-part application, the '775 Patent application, on November 16, 1999. Id. at 660.

13   **B.   Prosecution of the '775 Patent**

14   The '775 Patent issued on January 15, 2002 from application 09/442,060, filed on November

15   16, 1999. Trial Ex. 292. The application was a continuation-in-part of the '670 Patent application.

16   Trial Ex. 292. The inventors are the same: Diaz Nesamoney and MS Kiumarse Zamanian. The '775

17   patent, entitled "Apparatus and Method for Performing Data Transformations in Data

18   Warehousing," is assigned to Informatica. Trial Ex. 292.

19   "A continuation-in-part is an application filed during the lifetime of an earlier nonprovisional

20   application, repeating some substantial portion or all of the earlier nonprovisional application and

21   adding matter not disclosed in the said earlier nonprovisional application." Manual of Patent

22   Examining Procedure § 201.08. The examiner initially rejected Claims 1, 9 and 11 of the patent

23   application for double-patenting as rendered obvious by Claim 1 of the '670 Patent. Trial Ex. 194 at

24   98. Following Informatica's Amendment and Response, the examiner allowed the claims of the

25   '775 Patent.

26   The Court has determined that Claim 11, which covers a "computer implemented method for

27   transforming data," is supported by the disclosures of the '670 Patent and is entitled to the filing date

28   of the '670 Patent, i.e., November 7, 1997, whereas Claims 5 and 7 disclose new matter and have a

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1 filing date of November 16, 1999. See Order re Effective Filing Date of Claim 11 of '775 Patent,

2 dated March 8, 2007 (docket no. 582). Claim 5 of the '775 Patent claims a method for analyzing

3 data within a profiling application, whereas Claim 7 claims a method for analyzing data within a

4 data mining application. Trial Ex. 292. Informatica's expert, McGoveran, explained that a profiling

5 application identifies the characteristics of a person or product that have a particular advantage, Trial

6 Tr. at 1924:8-19, whereas a data mining application is used to identify previously unknown

7 relationships or patterns between sets of data, rather than focusing on particular data values. Trial Tr.

8 at 1927:17-1928:4.

9   Informatica released PowerMart 4.0 in February 1998, over one year before the '775

10 application date. See Pl Prop. Findings, ¶ 42; Trial Ex. 2378 at 37 (Informatica's Response to

11 BODI's Second Set of Interrog.). Informatica did not disclose PowerMart 4.0 during prosecution of

12 the '775 Patent. See Pl. Prop. Findings, ¶ 43. Nor did Informatica disclose PowerMart 3.0, Sagent

13 Data Mart Solution 1.0, or VMark DataStage 1.0 during that patent prosecution. Pl. Prop. Findings,

14 ¶¶ 45, 52, 58.

15   **C.**   **Prior Art**

16   The '670 and '775 Patents share a common "Background of the Invention" section in the

17 patent specification. Trial Exs. 214 at 2:1-40, 292 at 2:5-46. The Background section states, in part,

18 as follows:

19 > Presently, the existing approaches for handling transformations for
20 > data warehousing applications can be classified into three
   > categories: using procedural programming languages (e.g., C, C++,
   > and COBOL); using SQL expressions; or a combination of these
21 > two. Any of these three approaches, however, is primarily focused
   > on capturing the low-level algorithmic behavior of transformations
22 > and does not by any means facilitate the definition and exchange of
   > transformation metadata (i.e., data that describes how data is
23 > defined, organized, or processed). Furthermore, this was usually
   > performed by a highly specialized software engineer who would
24 > design custom programs tailored to specific applications. Such
   > programmers are relatively scarce and are in high demand. As
25 > such, even a simple task can be quite expensive. More complex
   > data transformations involve voluminous amounts of data that are
26 > viewed and interpreted differently by various analysts and
   > decision-makers.
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28 > Moreover, software vendors in the data warehousing domain often
   > offer specialized tools for defining and storing transformation
   > information in their products. Such tools are still geared towards

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> algorithmic behavior of transformations and usually provide graphical user interfaces to facilitate the use of procedural languages and/or SQL for that purpose. But more significantly, the format in which such transformation information is represented and saved is system-specific and low-level such that exchanging this information with other similar software becomes extremely difficult and error-prone. Hence, data transformation software might work properly for one database, but might be incompatible with another database which contains critical data. Presently, the only high-level protocol used for describing and exchanging transformation information between different data warehousing software is limited to the definition of field-level transformations with SQL statements that include logical, arithmetic, and string operations.

9   Trial Ex. 214 at col. 2:1-40. BODI emphasizes the first paragraph quoted above, especially the

10 reference to the need for highly specialized programmers, which it contends exaggerated the

11 difficulties of existing technologies before the invention, while underplaying the second paragraph.

12 Informatica contends that both paragraphs, taken together, adequately disclose the state of the field

13 prior to the invention.

14   Mr. Nesamoney, Informatica's former President/Chief Technology Officer and Chief

15 Operating Officer and one of the named inventors, testified that the section highlighted by BODI

16 was written by patent counsel and accurately reflected his understanding of existing approaches to

17 data warehousing. Trial Tr. at 555:13-556:21; Bench Trial Tr. at 2184:22-2185:10. Mr. Nesamoney

18 explained that the reference to the need for a "highly specialized software engineer who would

19 design custom programs tailored to specific applications" reflected his understanding of existing

20 handcoding approaches using COBOL, Visual Basic or SQL. Trial Tr. at 556:11-558:20. Mr.

21 Nesamoney testified that the reference to "specialized tools for defining and storing transformation

22 information" in the second paragraph accurately described PowerMart 3.0 and 3.5. Bench Trial Tr.

23 2280:7-2281:17. Mr. Nesamoney testified that he had discussed with patent counsel his knowledge

24 of the difficulty and expense of existing approaches, and explained that the Background section does

25 not mention specific ETL products because his usual practice was to describe prior approaches

26 generally. Bench Trial Tr. at 2190:25-2192:18. Mr. Nesamoney also admitted that although he had

27 reviewed drafts of the patent application, he did not fully read the final version that was submitted to

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1   the PTO, although he submitted a declaration stating that he had done so. Trial Tr. at 554:23-25;

2   Bench Trial Tr. at 2188:8-2189:18.

3   Dr. Zamanian, the other named inventor of the '670 and '775 Patents, has a specialized

4   background in component-based architectures and joined Informatica in the summer of 1997 while

5   work on the inventions was ongoing. Trial Tr. at 302:25-303:12. Dr. Zamanian believed that

6   reusable transformation objects were a novel approach to ETL and was unaware of any such

7   capability in competing products or in PowerMart 3. Trial Tr. at 350:20-351:1. Dr. Zamanian

8   testified that in order to fulfill his duty to disclose, he conducted a search on the internet for prior art,

9   and consulted with patent counsel about their research, and did not find anything specific to the

10 patent.   Bench Trial Tr. at 2285:12-21. Dr. Zamanian did not recall discussing PowerMart 3.5 (then

11 the current version) with the patent attorney, but believed that the patent attorney was familiar with

12 that product because he had filed other patents for Informatica. Bench Trial Tr. at 2286:6-12. Dr.

13 Zamanian testified that he was only very generally aware of competing products, but was not

14 familiar with them specifically. Bench Trial Tr. at 2286:17-2287:11. Dr. Zamanian also testified

15 that the Background section referred to handcoding approaches in order to explain that existing

16 approaches to building data transformations were neither easy nor inexpensive. Trial Tr. at 345:6-

17 349:8. Dr. Zamanian further testified that the reference to "specialized tools for defining and storing

18 transformation information" in the second paragraph cited above referred to ETL tools such as

19 PowerMart 3.0. Trial Tr. at 354:2-13. As BODI acknowledged at oral argument, Dr. Zamanian was

20 a particularly credible witness.

21   **D.   PowerMart Products**

22   Informatica issued a press release on April 8, 1996 announcing that PowerMart 3.0 was soon

23 to be released. Trial Ex. 2219 at 1. It stated that the product would "put the tools for building

24 targeted solutions in the hands of targeted users," rather than outsourced COBOL programmers. Id.

25 The press release also stated that the product was for building data marts ""using a highly visual

26 operating environment, and is based entirely in C++." Id. at 2.

27   A January 15, 1997 press release also markets this early PowerMart product as avoiding

28 COBOL. "[Customer] Owens & Minor chose PowerMart . . . because it automates the task of

1   building and deploying data marts-highly focused data warehouses-without having to write software

2   code by hand or generate COBOL." Trial Ex. 2549 at 1. Based on the date of the press release, the

3   referenced PowerMart product was either version 3.0 or 3.5. Bench Trial Tr. at 2272:12-2273:1.

4   The press release also states, "The real value of the data mart, however, lies in the data mining

5   capabilities the mart will enable." Trial Ex. 2549 at 2. Mr. Nesamoney testified that the data mining

6   references in the Owens & Minor press release was to the actual data mart, not to the PowerMart

7   product. Bench Trial Tr. at 2273:2-12.

8   As to PowerMart 4.0, which was released in February 1998, Mr. Nesamoney admitted that it

9   embodied some of the claims of the '775 Patent, but did not specify which ones. Bench Trial Tr. at

10 2271:24-2272:3. Dr. Zamanian testified that it was possible to use PowerMart 4.0 to determine

11 which of a company's products have the highest profit margins and which have the lowest, which

12 defense counsel defined as data profiling. Bench Trial Tr. at 2292:25-2293:8. Dr. Zamanian denied

13 that the product could really do data mining. Bench Trial Tr. at 2293:9-12. He acknowledged that

14 PowerMart 4.0 could be used to determine which products did better than a particular, pre-defined

15 threshold definition in a specific case. However, he expressed doubt that such an exercise

16 constituted real data mining and denied that the product could perform such a function in a

17 generalized sense. Bench Trial Tr. at 2293:9-2294:3. Informatica's expert, Mr. McGoveran,

18 explained that data mining goes beyond such simple, specific queries to uncover hidden

19 relationships across massive amounts of data across multiple data warehouses. Trial Tr. at 1926:14-

20 1928:5. In response to interrogatories, Informatica initially admitted that PowerMart 4.0 embodied

21 each of the asserted claims of the '775 Patent. After claims construction, however, Informatica

22 submitted a supplemental response that Claims 5 and 7 were not practiced until PowerCenter 6. See

23 Trial Ex. 2369 at 13 (Resp. to Interrog. No. 6, dated Oct. 30, 2003); Pl's Am.Trial Br. at 20 and

24 Donnelly Suppl. Decl., Ex. 1 (DTX 2376 at 4 (Second Suppl. Resp. to Interrog. No. 8, dated April

25 28, 2006)).

26 **II.   LEGAL STANDARD**

27   "To hold a patent unenforceable due to inequitable conduct, there must be clear and

28 convincing evidence that the applicant (1) made an affirmative misrepresentation of material fact,

1   failed to disclose material information, or submitted false material information, and (2) intended to

2   deceive the U.S. Patent and Trademark Office ("PTO")." Cargill, Inc. v. Canbra Foods, Ltd., 476

3   F.3d 1359, 1363-64 (Fed. Cir. 2007) (citing Impax Labs., Inc. v. Aventis Pharm. Inc., 468 F.3d

4   1366, 1374 (Fed.Cir.2006)). Once the party asserting inequitable conduct proves a threshold level

5   of materiality and intent by clear and convincing evidence, "[t]he court must then determine whether

6   the questioned conduct amounts to inequitable conduct by balancing the levels of materiality and

7   intent, 'with a greater showing of one factor allowing a lesser showing of the other.'" Digital

8   Control Inc. v. Charles Machine Works, 437 F.3d 1309, 1313 (Fed.Cir. 2006), quoting Union Pac.

9   Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 693 (Fed.Cir. 2001).

10   The Federal Circuit recognizes several tests for the materiality element of inequitable

11   conduct. Under the "reasonable examiner" test, materiality requires a showing that "'a reasonable

12   examiner would have considered such prior art important in deciding whether to allow the patent

13   application.'" Digital Control, 437 F.3d at 1314, quoting Dayco Prods., Inc. v. Total Containment,

14   Inc., 329 F.3d 1358, 1363 (Fed.Cir. 2003) (internal quotations omitted). The "reasonable examiner"

15   test is based in part on the standard of materiality articulated in the PTO's Rule 56, describing the

16   duty of candor and good faith, or duty of disclosure, before it was amended in 1992. Id. That

17   regulation provided as follows:

18   A duty of candor and good faith toward the Patent and Trademark
             Office rests on the inventor, on each attorney or agent who prepares or
19   prosecutes the application and on every other individual who is
             substantively involved in the preparation or prosecution of the
20   application and who is associated with the inventor, with the assignee
             or with anyone to whom there is an obligation to assign the
21   application. All such individuals have a duty to disclose to the Office
             information they are aware of which is material to the examination of
22   the application. Such information is material where there is a
             substantial likelihood that a reasonable examiner would consider it
23   important in deciding whether to allow the application to issue as a
             patent.
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25   Dayco Prods., 329 F.3d at 1363, n.1, quoting 37 C.F.R. § 1.56(a) (1991) (emphases added in

26   original). Under the "reasonable examiner" standard, prior art may be material for inequitable

27   conduct even though it would not be invalidating. Digital Control, 437 F.3d at 1318.

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The PTO's current version of Rule 56 articulates a different test of materiality, but leaves intact the "reasonable examiner" standard. Digital Control, 437 F.3d at 1316. Rule 56 now provides as follows:

> (b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and
>
> > (1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or
> >
> > (2) It refutes, or is inconsistent with, a position the applicant takes in:
> > > (I) Opposing an argument of unpatentability relied on by the Office, or
> > > (ii) Asserting an argument of patentability.
>
> A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

37 C.F.R. § 1.56(b) (2007).

Under the various tests of materiality, "to the extent that one standard requires a higher showing of materiality than another standard, the requisite finding of intent may be lower" on the sliding scale for inequitable conduct balancing materiality and intent. Digital Control, 437 F.3d at 1316. In other words, to establish the requisite intent "requires that 'the involved conduct, viewed in light of all the evidence, including evidence indicative of good faith, must indicate sufficient culpability to require a finding of intent to deceive.' Intent rarely can be, and need not be, proven by direct evidence. Instead, an intent to deceive is usually inferred from the facts and circumstances surrounding the conduct at issue." Cargill, 476 F.3d at 1364, quoting Impax Labs., 468 F.3d at 1374-75 (internal citation omitted).

III.   ANALYSIS

BODI identifies several omissions and alleged misstatements in the course of the patent prosecution as evidence of inequitable conduct. First, BODI contends that Informatica failed to disclose material prior art products, namely PowerMart 3.0 and the later version 4.0, Sagent 1.0 and Vmark DataStage, and disclosed instead trivial and misleading prior art. Second, BODI argues that

1   Informatica misrepresented the state of the prior art as less advanced than it was and marketed its

2   PowerMart 3.0 product as solving prior art problems that were described in the Background section

3   of the '670 and '775 patent applications. Third, BODI argues that Mr. Nesamoney submitted a false

4   declaration to the PTO regarding his review and understanding of the contents of the application.

5   **A.   Materiality**

6   BODI contends that Sagent 1.0, VMark DataStage and PowerMart are material prior art

7   because they have features that read on the claims, namely, reusable components that transform data

8   according to metadata and some form of ports or abstractions that describe the inputs and outputs of

9   sources, targets and transformations. BODI further argues that Informatica should not be permitted

10 to argue now that the pre-built transforms in the prior art products are not material, when it had

11 alleged at the start of litigation that the pre-built transforms in BODI's Data Integrator, without

12 EDFs, infringed Informatica's patents. While the Court recognizes that Informatica changed its

13 position on what features of BODI's product infringed, such changes in the ordinary course of patent

14 litigation are not unusual as the parties learn more about the accused product, and react to claim

15 construction and other developments. The Court does not consider such a change by itself to

16 warrant a finding of materiality.

17   With respect to Sagent 1.0 and VMark DataStage, the Court determines that these products

18 are not material. First, the jury squarely rejected BODI's defenses of anticipation based on these

19 products and obviousness based on the VMark Technical Note, plainly not crediting the opinion of

20 BODI's expert. Although the prior art need not be invalidating to be material, the jury's verdict

21 illustrates that these products are immaterial or, at the very most, only minimally material such that a

22 high showing of intent would be necessary to support inequitable conduct. The evidence did not

23 show that these products transform data according to the steps articulated in Claim 1 of the '670

24 Patent: specifying a source, storing metadata corresponding to a plurality of transformation objects,

25 specifying a target, selecting at least one transformation objects, mapping source to transformation

26 object, transforming the data according to the metadata, and then mapping to a target. For example,

27 these products did not transform data according to metadata, as required by the patents. Although

28 the Sagent and VMark products had some stored metadata, there is insufficient evidence that those

1   products transformed data according to metadata stored in the repository, as required by the claims.

2   Rather, these products were the type of software existing prior to the invention described in the

3   Background section of the patent set forth above. For example, the VMark product guide warned its

4   users, "Writing a plug-in stage is not for the faint-hearted." Trial Ex.162 at 4; Trial Tr. 841:1-13.

5   Therefore, these products do not establish a prima facie case of unpatentability to meet the

6   materiality standard under Rule 56. 37 C.F.R. § 1.56(b).

7   Furthermore, although prior art need not be invalidating to be material under the reasonable

8   examiner standard, it is unlikely that a reasonable examiner would have considered these products

9   important in deciding whether to allow the patent application. Even if these products are material

10   under the reasonable examiner standard, the jury's finding that the patents in suit were not

11   anticipated by the Sagent 1.0 and VMark DataStage products illustrate that at most these products

12   had very a low level of materiality.

13   BODI did not present any evidence to the jury that PowerMart 3.0 invalidated the patents.

14   Originally, Dr. Kelly had no opinion as to whether that product anticipated any claim to the '670

15   Patent under the Court's construction of transformation object. Bench Trial Tr. at 2338:16-22. Dr.

16   Kelly testified at the bench trial, however, that PowerMart 3.0 transformed data according to

17   predefined instructions, or metadata, that was present before the user selects the operators, although

18   he had not identified such metadata in his expert report. Bench Trial Tr. at 2337:13-22. Dr. Kelly

19   claimed that even the most elementary arithmetic operation, such as one performed by a "plus" sign,

20   constituted a transformation object, and that the metadata corresponding to those objects is compiled

21   C++ code which is stored by installing the program. Bench Trial Tr. at 2340:4 - 2344:14. Dr.

22   Kelly's new opinion is inconsistent with the patent specification explaining that C++ code "does not

23   by any means facilitate the definition and exchange of transformation metadata (i.e., data that

24   describes how data is defined, organized, or processed)." Trial Ex. 214 at col. 2:1-10. Informatica's

25   expert, McGoveran, countered more persuasively that "no one of ordinary skill in the art would

26   understand metadata as being what is embedded in a program." Trial Tr. 1914:8-10. He stated that

27   metadata must be independent of the code and be shareable and usable. Trial Tr. 1914:10-12.

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United States District Court

For the Northern District of California

1   Dr. Kelly's testimony was not persuasive, and would prove far too much if credited. Indeed,

2   the Background section of the patent disclosed more sophisticated ETL functions than the use of a

3   "plus" sign. Prior to the patent, metadata as used simply to describe columns and tables was not

4   novel. Rather, the invention used metadata to describe the transformation object itself and its ports

5   in order to allow those components to be reusable and shareable. Dr. Zamanian also testified

6   persuasively that reusable transformation objects were not available until version 4.0. Trial Tr. at

7   350:20-351:1.

8   PowerMart 3.0 does not establish a prima facie case of unpatentability, nor is it likely that a

9   reasonable examiner would have considered it important in deciding whether to allow the '670 or

10   '775 Patents in light of the evidence that PowerMart 3.0 did not use a component-based approach

11   and did not have the transformation objects of the patents. Trial Tr. at 177:7-182:18 (Lunasin);

12   303:10-306:23 (Zamanian). At most, PowerMart 3.0 represents a specific example of the type of

13   prior art described in the Background section. Further, the Sankaran patent on the PowerMart 3

14   generation of products disclosed its ETL approach and was of record in the file histories of the '670

15   and '775 Patents, Trial Ex.192 at 192-196 and Ex.194 at 181.

16   As to PowerMart 4.0, however, BODI has presented evidence that this product is material,

17   albeit not necessarily invalidating, to the '775 Patent.   Mr. McGoveran testified that PowerMart 4.0

18   embodied the claimed inventions of the '670 Patent. Trial Tr. at 610:14–612:7. Mr. Nesamoney

19   testified that PowerMart 4.0 embodied some of the claims of the '775 Patent and could not specify

20   which ones. Bench Trial Tr. at 2271:24-2272:3. When questioned about whether PowerMart 4.0

21   could be used within profiling and data mining applications, which are disclosed in Claims 5 and 7,

22   Dr. Zamanian only acknowledged that 4.0 could perform particular queries, but did not testify that

23   4.0 was capable of true profiling and data mining. Bench Trial Tr. at 2292:25-2294:3.

24   BODI has presented no evidence that PowerMart 4.0 was actually used in any analytic

25   applications prior to November 1999 when the '775 Patent application was filed. BODI relies on a

26   press release issued by Informatica in January 1997 that states that PowerMart 3.0 or 3.5 will

27   support data mining, and the data mart will enable data mining capabilities. See Trial Ex. 2549.

28   This press release does not show, however, that PowerMart 3.0 did anything more than facilitate a

1 better data mart, which would provide better organized and more accurate data to mine using

2 different technology.   Mr. Nesamoney testified persuasively that the release referred to the data

3 mart and explained that data mining is a very broad term with varying definitions in different

4 contexts. Bench Trial Tr. at 2273:2-22.

5   Informatica argues that the inventions, as the specification describes, concern transforming

6 data in the claimed analytic application to accomplish data analytics, rather than laying claim to the

7 general use of analytic applications in conjunction with a data warehouse or data mart created by its

8 PowerMart products. See '775 Patent at col. 16:28-29 ("the present invention can be readily

9 encapsulated within an application"). No evidence shows that PowerMart 4.0 embodied analytical

10 applications or was actually used in real profiling or data mining applications, so PowerMart 4.0

11 does not establish a prima facie case of invalidity of the '775 Patent. The Court concludes, however,

12 that there is a substantial likelihood that a reasonable examiner would have considered PowerMart

13 4.0 important to consider whether embedding the same transformation methods into an analytic

14 application was obvious.

15   **B.   Intent**

16   **1.   Non-Disclosure of Prior Art**

17   Having determined that PowerMart 4.0 was significantly material to the '775 Patent, and

18 assuming arguendo that VMark DataStage and Sagent 1.0 were material to both patents, the

19 evidence does not support an intent to mislead the PTO. The Court finds credible Mr. Zamanian's

20 testimony that he was not familiar with the prior art beyond what was disclosed in the patents. The

21 Court is concerned by Mr. Nesamoney's failure to recollect why PowerMart 4.0, which was released

22 more than one year before the '775 Patent application was filed, was not disclosed to the PTO, as

23 well as his failure to thoroughly read the patent application. Mr. Nesamoney did explain that his

24 normal practice was to discuss existing technologies, including Informatica's own products, with the

25 patent attorneys and how the invention improved on those approaches. Bench Trial Tr. at 2219:10-

26 2220:1. Mr. Nesamoney's consultations with patent counsel, and Dr. Zamanian's searches for prior

27 art and discussions with patent counsel about prior art, make a minimal showing of good faith efforts

28 to fulfill their duty to disclose. As inventors, however, their duty is not discharged merely by

1   disclosing to an attorney. See 37 C.F.R. § 1.56(d) ("Individuals other than the attorney, agent or

2   inventor may comply with this section by disclosing information to the attorney, agent or inventor.")

3   (emphasis added).[1] Informatica contends that the mere lack of a good faith explanation for the

4   nondisclosure "cannot constitute clear and convincing evidence sufficient to support a determination

5   of culpable intent." Pl's Am. Trial Br. at 8, quoting M. Eagles Tool Warehouse v. Fisher Tooling

6   Co., 439 F.3d 1335, 1341 (Fed. Cir. 2006). That case, however, only held that such failure to

7   disclose, without other evidence of intent, was insufficient to support granting summary judgment of

8   inequitable conduct. Id. at 1343. Furthermore, the Federal Circuit noted that the inventor there was

9   unable to offer a good faith explanation because he died six months after the application was filed.

10 Id. at 1342. Nonetheless, after hearing testimony, the Court is not persuaded that Informatica's lack

11 of an explanation for not disclosing PowerMart 4.0 supports a finding here of intent under all the

12 relevant circumstances.

13   It is true that "'close cases should be resolved by disclosure, not unilaterally by applicant.'"

14 Critikon, Inc.v. Becton Dickinson Vascular Access, Inc., 120 F.3d 1253, 1257 (Fed. Cir. 1997)

15 (citation omitted). However, cases addressing the intent requirement typically find more egregious

16 circumstances than are present here. In Critikon, the Federal Circuit held that the original and

17 reissue patents were unenforceable due to the patentee's failure to disclose a material patent and

18 failure to disclose ongoing litigation during the reissue proceedings, reversing the district court's

19 determination of no inequitable conduct. 120 F.3d at 1258-59. There, the court noted that the

20 plaintiff's patent counsel had reviewed in detail the patent on the omitted prior art that disclosed the

21 claimed "retaining means" feature of the plaintiff's patent for an intravenous catheter. Id. at 1256.

22 Furthermore, the court found that the examiner repeatedly raised the importance of the claimed

23 feature during the course of prosecution. Id. at 1256-57. Based on those facts, the Federal Circuit

24 found no evidence to support a good faith explanation for the failure to cite the prior art, which the

25 patentee should have known was material, or the failure to disclose the litigation over the original

26 patent during reissue proceedings, and inferred intent to mislead from the high level of materiality

27

28   [1]   Informatica's reliance on this regulation in its Surreply to excuse the lack of disclosure
        does not appear to be well taken. Surreply at 7:25-27.

14

1   and the failure to establish subjective good faith. Id. at 1259. Here, by contrast, there is no such

2   clear and convincing evidence that Informatica knew or should have known of the materiality of the

3   prior art. This case is also unlike Cargill, 476 F.3d at 1365, where the examiner had relied on test

4   data resulting in the claimed cooking oil's "strikingly superior" oxidative stability values, not

5   knowing that the test results were contradicted by the undisclosed test data. In Cargill, the Federal

6   Circuit upheld the lower court's finding that "the omitted test data was related to 'the heart of the

7   question that bedeviled the examiner: the nature of the difference between IMC 129 and IMC 130.'"

8   Id. at 1367. Here, there is no such showing of a high degree of materiality. The weight of the

9   evidence, including the inventors' testimony that they believed that their patents presented a novel

10 approach to ETL, does not support an inference of intent to deceive. Informatica's failure to

11 disclose the prior art, though improper, at most amounts to gross negligence. Gross negligence or

12 carelessness, without more, is an insufficient basis to find intent to deceive. Kingsdown Medical

13 Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 873 (Fed. Cir. 1988).

14   As to Sagent 1.0 and VMark, there is insufficient evidence of intent to withhold material

15 information. The materiality of that prior art, if any, is not substantial, and the inventors testified

16 that they were not familiar with the specifics of the competing products, that the Background section

17 accurately reflected the state of the prior art, and that their invention presented a novel approach. In

18 Bruno Independent Living Aids, Inc. v. Acorn Mobility Services, Ltd., 394 F.3d 1348 (Fed. Cir.

19 2005), by contrast, the patentee had simultaneously sought approval from the FDA to sell his stairlift

20 product, which embodied the claims in his pending patent application, by comparing the similarity

21 of his product's design and function with a competitor's product that the patentee did not disclose to

22 the PTO. The Federal Circuit found disingenuous the patentee's argument that he did not appreciate

23 the materiality of the competitor's product for purposes of patentability, and held that the failure to

24 disclose the prior art to the PTO, after disclosing it to the FDA as a product of "substantial

25 equivalence," supported a finding of deceptive intent. 394 F.3d at 1354. Here, unlike Bruno, there

26 is no clear and convincing evidence that Informatica withheld the materiality of the competing

27 products.

28

1   BODI also argues that Informatica deliberately manipulated the patent system by belatedly

2   submitting only trivial and misleading prior art, i.e., the three articles submitted in the Information

3   Disclosure Statement. Trial Ex. 192 at 602. Informatica explains, however, that it disclosed these

4   articles after filing the application in order to comply with their duty to disclose references cited

5   during the examination of a foreign counterpart application. The fact that Informatica disclosed

6   articles that were subsequently discovered by a foreign examiner does not evidence intent to deceive

7   or confuse the PTO. BODI further argues that Informatica overcame the examiner's initial rejection

8   of the '670 Patent application by filing an Amendment and Response without disclosing the prior art

9   products, suggesting that the patent would not have issued if the prior art products had been

10   disclosed. The Court is satisfied, however, that on its Amendment and Response on the '670 Patent

11   application, Informatica distinguished the invention from the prior art by its use of componentized

12   transformation objects that were defined in terms of metadata, rather than the limited, monolithic

13   transformation module disclosed in the prior art. Trial Ex. 192 at 622-623. In the absence of

14   evidence that either PowerMart 3.0, Sagent 1.0 or VMark DataStage used componentized

15   transformation objects defined in terms of metadata, disclosure of these specific products would not

16   likely have precluded the amendment, and would not be material.

17   As to its own PowerMart 4.0 product, however, Informatica should have known that it was

18   material to the claims in the '775 Patent application. The inventors testified that they were not

19   familiar with the '775 Patent, and did not explain their failure to disclose PowerMart 4.0. Bench

20   Trial Tr. 2270:2-9 (Nesamoney); 2291:17-2292:3 (Zamanian). However, under all the

21   circumstances, the Court concludes that this failure to disclose amounts to gross negligence, but not

22   intentional deception.

23   **2.   Background Section**

24   BODI contends that Informatica misrepresented the state of existing ETL approaches in the

25   Background section of the patent applications by asserting that "even a simple task can be quite

26   expensive." BODI relies, in part, on Informatica's marketing materials describing PowerMart 3.0 as

27   helping to address some of the same problems described in the Background section of the '670

28   Patent. Def. Trial Br. re Ineq. Cond. at 10-11. See Bench Trial Tr. at 2213:9-2215:16. The

1 marketing materials contain typical puffery but do not demonstrate that PowerMart 3.0 embodied or

2 rendered obvious the inventions. Rather, the Court accepts the inventors' testimony that they

3 thought that the '670 Patent was a novel approach to ETL. See Trial Tr. at 350:20-351:1

4 (Zamanian); 521:5-14 (Nesamoney). The Court further concludes that the Background section did

5 not intentionally misrepresent the state of the existing ETL approaches, including PowerMart 3.0.

6 <div align="center">**3.   Nesamoney Declaration**</div>

7 BODI argues that Mr. Nesamoney's false declaration that he reviewed the patent application

8 before signing it is sufficient to show deceptive intent. Def's Reply at 6-7. Mr. Nesamoney

9 admitted at trial that he reviewed earlier drafts of the application, but not the final version. Though

10 hardly the model of veracity or diligence before the PTO, Mr. Nesamoney's declaration does not rise

11 to the level of proving deceptive intent in withholding material information, in contrast, for example,

12 to the falsified data submitted in an affidavit designed to overcome prior-art rejections in Rohm &

13 Haas v. Crystal Chem. Co., 722 F.2d 1556, 1571 (Fed. Cir. 1983), or the fraudulent omission by

14 supposedly disinterested witnesses about their familiarity with the invention in Refac Int'l Ltd. v.

15 Lotus Dev. Corp., 81 F.3d 1576, 1580 (Fed. Cir. 1996). Again, Mr. Nesamoney's misconduct

16 amounts to gross negligence but not intentional deception.

17 **C.   Balancing**

18 Having determined that Informatica's gross negligence in failing to disclose PowerMart 4.0

19 does not rise to the level of intent to deceive, the Court concludes that the patents are not

20 unenforceable for inequitable conduct. Nonetheless, assuming arguendo that BODI has met the

21 requisite elements of materiality and intent, a finding of inequitable conduct is not supported by the

22 evidence, in light of all the circumstances. See Cargill, 476 F.3d at 1368 (once materiality and

23 intent are established by clear and convincing evidence, it is necessary to evaluate all the

24 circumstances of the case to determine whether the patent should be unenforceable). As to

25 PowerMart 3.0, Sagent 1.0 and VMark DataStage, the Court determines that the very minimal

26 showing of materiality, if any, balanced against at most a very weak inference of intent to withhold

27 that prior art, weighs against a determination that Informatica is culpable of inequitable conduct as
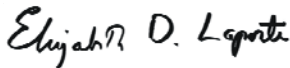
28 to those products.

1   PowerMart 4.0 presents a closer question as to the '775 Patent. Even if the element of intent

2   were established, however, the balance does not lead to a conclusion of unenforceability. There was

3   insufficient evidence that Claims 5 and 7 were actually practiced by PowerMart 4.0, as opposed to

4   the possibility of performing particular profiling or data mining functions with it. While the product

5   was highly material to Claim 11, the Court has determined that Claim 11 shares the effective filing

6   date of the '670 Patent, which predates PowerMart 4.0, so as a technical matter it perhaps cannot be

7   invalidating prior art. Nonetheless, Claim 11 was prosecuted prior to this Court's determination and

8   after the release of the 4.0 product, so PowerMart 4.0 should have been disclosed in conjunction

9   with Claim 11 as well as the other claims of the '775 Patent at issue. However, having heard the

10   inventors testify and assessing their credibility in light of all the evidence, the Court determines that

11   the non-disclosure constituted gross negligence, but not a deliberate intent to deceive, and, in any

12   case, on balance the patent is enforceable.

13   **IV.   CONCLUSION**

14   For the reasons stated above, the Court concludes that Informatica did not engage in

15   inequitable conduct during prosecution, so the '670 and '775 Patents are enforceable.

16   IT IS SO ORDERED.

17   Dated: May 16, 2007

Elijah D. Laporte

ELIZABETH D. LAPORTE
18   United States Magistrate Judge

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